

AUTHOR INDEX

1977, Volume 11

A

- ABELMANN, W. H. See MASS-SCHWARTZ, A., *et al.*
 ABELSON, D., and KAMENS, E. A. Bedside measurement of systolic and diastolic time intervals using the stethometer: instruments and techniques, 270
 AL-JANABI, N. See PARKER, R., *et al.*
 ALLEN, D. G. On the relationship between action potential duration and tension in cat papillary muscle, 210
 ANDERSEN, L. H. See SECHER, N. J., and ANDERSEN, L. H.
 ANGELSTEN, B. A. J. See BRUBAKK, A. O., *et al.*
 ANLIKER, M. See MAHLER, F., *et al.*
 APPEL, M. See BUI-MONG-HUNG, *et al.*
 ARBORELIUS, M. See MALM, A., *et al.*
 ARNSDORF, M. F., ROTHBAUM, D. A., and CHILDERS, R. W. Effect of direct current countershock on atrial and ventricular electrophysiological properties and myocardial potassium efflux in the thoracotomized dog, 324
 —, SCHREINER, E., GAMBETTA, M., FRIEDLANDER, I., and CHILDERS, R. W. Electrophysiological changes in the canine atrium and ventricle during progressive hyperkalaemia: electrocardiographical correlates and the *in vivo* validation of *in vitro* predictions, 409

B

- BARDET, J., ROCHA, P., RIGAUD, M., BOURDARIAS, J. P., and MATHIVAT, A. Left ventricular compliance in acute myocardial infarction in man, 122
 BASKETT, J. J., BEASLEY, M. G., MURPHY, G. J., HYAMS, D. E., and GOSLING, R. G. Screening for carotid junction disease by spectral analysis of Doppler signals, 147
 BATTEN, J. R. See NEWMAN, D. L., *et al.*
 BEASLEY, M. G. See BASKETT, J. J., *et al.*
 BEER, E. L. DE See DE BEER, E. L.
 BELLER, G. A., HOOD, W. B., and SMITH, T. W. Effects of ischaemia and coronary reperfusion on regional myocardial blood flow and on the epicardial electrogram, 489
 BISHOP, J. M. See STARK, R. D., *et al.*
 BLATTBERG, B. See LEVY, M. N., and BLATTBERG, B.
 BLOMQUIST, G. See WILLERSON, J. T., *et al.*
 BOLLINGER, A. See MAHLER, F., *et al.*
 BONES, P. J., and IKRAM, H. A method of left ventricular ejection fraction estimation from cineangiocardiograms employing a special-purpose calculator: instruments and techniques, 470
 BONTE, F. J. See WILLERSON, J. T., *et al.*
 BOOM, H. B. K. See DE BEER, E. L., *et al.*
 BORNET, E. P., WOOD, J. M., GOLDSTEIN, M. A., ENTMAN, M. L., LEWIS, R. M., DUNN, F. A., and SCHWARTZ, A. Physiological, biochemical, and morphological characteristics of myocardial anoxia: the use of a semi-perfusion canine preparation, 568
 BORNMYR, S. See MALM, A., *et al.*
 BOURDARIAS, J. P. See BARDET, J., *et al.*
 BOWDEN, N. L. R. See NEWMAN, D. L., *et al.*
 BRAIS, M. See ZELIS, R., *et al.*
 BRICAUD, H. See LARRUE, J., *et al.*
 BROADLEY, K. J. See LUMLEY, P., *et al.*
 BRORSON, L. See OLSSON, B., *et al.*
 BRUBAKK, A. O., ANGELSEN, B. A. J., and HATLE, L. Diagnosis of valvular heart disease using transcutaneous Doppler ultrasound, 461

- BRUNNER, H. H. See MAHLER, F., *et al.*
 BRUTSAERT, D. L., and PAULUS, W. J. Loading and performance of the heart as muscle and pump: special review article, 1
 BUI-MONG-HUNG, APPEL, M., and DE MENDONCA, M. Changes of the kinetics of calcium washout from dog heart after ischaemia, 260
 BUJA, L. M. See WILLERSON, J. T., *et al.*
 BUMPUS, F. M. See SEN, S., *et al.*

C

- CAMERON, A. J. V. See REVIS, N. W., *et al.*
 CAPONE, R. J. See MOST, A. S., *et al.*
 CARLETON, R. A. See SUSMANO, A., *et al.*
 CARPENTIER, R., NARVARTE, J., and SANHUEZA, S. Catechol-mediated effects of harmaline on the action potential of rat atrial fibres, 39
 CASPARI, P. G., NEWCOMB, M., GIBSON, K., and HARRIS, P. Collagen in the normal and hypertrophied human ventricle, 554
 CASTY, M. See MAHLER, F., *et al.*
 CHENEY, C. P. See MORRISON, E. S., *et al.*
 CHESKY, J. A., and ROCKSTEIN, M. Reduced myocardial actomyosin adenosine triphosphatase activity in the ageing male Fischer rat, 242
 CHILDERS, R. W. See ARNSDORF, M. F., *et al.*
 CINGOLANI, H. E. See MATTIAZZI, A. R., *et al.*
 CULLEN, M. J. See SHERIDAN, D. J., *et al.*

D

- DARET, D. See LARRUE, J., *et al.*
 DAVIDSON, N. S. See STREATFIELD, K. A., *et al.*
 DAVIES, P. See TYNAN, M., *et al.*
 DE BEER, E. L., BOOM, H. B. K., and NAAFS, B. The combined influence of the stimulus frequency of the vagal nerves and the atrial stimulus interval on the atrio-ventricular conduction time, 47
 DE MENDONCA, M. See BUI-MONG-HUNG, *et al.*
 DE NES, M. See MASERI, A., *et al.*
 DESGRANGES, C. See LARRUE, J., *et al.*
 DEVYNCK, M.-A. See DUVAL, D., *et al.*
 DIANDA, R. See MASINI, G., and DIANDA, R.
 DI COLA, V. C., DOWNING, S. E., DONABEDIAN, R. K., and ZARET, B. L. Pathophysiological correlates of thallium-201 myocardial uptake in experimental infarction, 141
 DONABEDIAN, R. K. See DI COLA, V. C., *et al.*
 DOWNING, S. E. See DI COLA, V. C., *et al.*
 DUNN, F. A. See BORNET, E. P., *et al.*
 DUVAL, D., FUNDER, J. W., DEVYNCK, M.-A., and MEYER, P. Arterial glucocorticoid receptors: the binding of tritiated dexamethasone in rabbit aorta, 529

E

- ENTMAN, M. L. See BORNET, E. P., *et al.*

F

- FASSOLD, E. See NAYLOR, W. G., and FASSOLD, E.
 FITZPATRICK, T. M. See JOHNSON, M., *et al.*
 FLAMENG, W. See WÜSTEN, B., *et al.*
 FRICK, J. See MORRISON, E. S., *et al.*
 FRIEDLANDER, I. See ARNSDORF, M. F., *et al.*

- FROHLICH, E. D. See WALSH, G. M., *et al*
 FUNDER, J. W. See DUVAL, D., *et al*

G

- GAMBETTA, M. See ARNSDORF, M. F., *et al*
 GEHA, A. S. See MALIK, A. B., and GEHA, A. S.
 GIBSON, K. See CASPARI, P. G., *et al*
 GILES, R. W., and WILCKEN, D. E. L. Reactive hyperaemia in the dog heart: evidence for a myogenic contribution, 64
 ——— Reactive hyperaemia in the dog heart: interrelations between adenosine, ATP, and aminophylline and the effect of indomethacin, 113
 GILL, R. L. See MALM, A., *et al*
 GOLDSTEIN, M. A. See BORNET, E. P., *et al*
 GOODYER, A. V. N., WONG, B. Y., and LANGOU, R. Effect of regional myocardial ischaemia on left ventricular isovolumic contraction, 299
 GOSLING, R. G. See BASKETT, J. J., *et al*
 GRAHAM, T. P. See MATTIAZZI, A. R., *et al*
 GRAU, A. See NAYLER, W. G., *et al*
 GROSS, G. J., and WARLITER, D. C. Intracoronary versus intravenous nitroglycerin on the transmural distribution of coronary blood flow, 499

H

- HALES, C. A., ROUSE, E. T., and KAZEMI, H. Failure of saralasin acetate, a competitive inhibitor of angiotensin II, to diminish alveolar hypoxic vasoconstriction in the dog, 541
 HALLBÄCK, M. See NORESSON, E., *et al*
 HARPER, R. See OLSSON, B., *et al*
 HARRIS, E. A. See RUSH, E. C., *et al*
 HARRIS, P. See CASPARI, P. G., *et al*
 HARRIS, R. A. See WILLERSON, J. T., *et al*
 HARWOOD, B. N. See TANZ, R. D., *et al*
 HATLE, L. See BRUBAKK, A. O., *et al*
 HEARSE, D. J. See OGUNRO, E. A., *et al*
 HENIN, N. F. See ZSOTÉR, T. T., *et al*
 HO, L. C. See ZSOTÉR, T. T., *et al*
 HOOD, W. B. See BELLER, G. A., *et al*
 HUGENHOLTZ, P. G. See VERDOUW, P. D., *et al*
 HURLEY, E. See ZELIS, R., *et al*
 HYAMS, D. E. See BASKETT, J. J., *et al*

I

- IKRAM, H. See BONES, P. J., and IKRAM, H.

J

- JANABI, N. AL- See AL-JANABI, N.
 JOHNSON, M., WICKS, T. C., FITZPATRICK, T. M., KOT, P. A., RAMWELL, P. W., and ROSE, J. C. Platelets and the vascular responses to arachidonic acid in dogs, 238
 JOHNSON, S. P. See SCHOENBERGER, A. A., *et al*
 JONES, J. V. See NORESSON, E., *et al*
 JOSHI, R. C. See STARK, R. D., *et al*

K

- KAMENS, E. A. See ABELSON, D., and KAMENS, E. A.
 KAZEMI, H. See HALES, C. A., *et al*
 KOT, P. A. See JOHNSON, M., *et al*
 KROMS, M. See MORRISON, E. S., *et al*

L

- L'ABBATE, A. See MASERI, A., *et al*

- LANGOU, R. See GOODYER, A. V. N., *et al*
 LARRUE, J., DESGRANGES, C., DARET, D., and BRICAUD, H. Effects of hypercholesterolaemic serum on aortic explants from normal rats, 519
 LEE, W. M. See MORRISON, E. S., *et al*
 LEVY, G. P. See LUMLEY, P., *et al*
 LEVY, M. N., and BLATTBERG, B. Correlation of the mechanical responses of the heart with the norepinephrine overflow during cardiac sympathetic neural stimulation in the dog, 481
 LEWIS, R. M. See BORNET, E. P., *et al*
 LEWIS, S. See WILLERSON, J. T., *et al*
 LILJA, B. See MALM, A., *et al*
 LOTYSH, M. See ZELIS, R., *et al*
 LUMLEY, P., BROADLEY, K. J., and LEVY, G. P. Analysis of the inotropic : chronotropic selectivity of dobutamine and dopamine in anaesthetised dogs and guinea-pig isolated atria, 17

M

- MCCLOSKEY, D. I. See STREATFEILD, K. A., *et al*
 MCGREGOR, C. G. A. See WHEATLEY, D. J., and MCGREGOR, C. G. A.
 MAGRINI, F., and TARAZI, R. C. New approach to local thermomodulation: use of pig tail catheters to avoid basic difficulties: instruments and techniques, 576
 MAHLER, F., BRUNNER, H. H., BOLLINGER, A., CASTY, M., and ANLIKER, M. Changes in phasic femoral artery flow induced by various stimuli: a study with percutaneous pulsed Doppler ultrasound, 454
 MALIK, A. B., and GEHA, A. S. Cardiac function, coronary flow and MVO₂ in hypertrophy induced by pressure and volume overloading, 310
 MALM, A., ARBORELIUS, M., BORNMYR, S., LILJA, B., and GILL, R. L. Effects of oxygen on acute myocardial infarction: a thermographic study in the dog, 512
 MANCINI, P. See MASERI, A., *et al*
 MARZILLI, M. See MASERI, A., *et al*
 MASERI, A., L'ABBATE, A., MICHELASSI, C., PESOLA, A., PISANI, P., MARZILLI, M., DE NES, M., and MANCINI, P. Possibilities, limitations and technique for the study of regional myocardial perfusion in man by Xenon-133, 277
 MASINI, G., and DIANDA, R. Analysis of the interpolation phenomenon in man evaluated by premature atrial stimulation, 334
 MASON, D. T. See ZELIS, R., *et al*
 MASS-SCHWARTZ, A., WEINSTOCK, R. S., WAGNER, R. L., and ABELMANN, W. H. Right and left ventricular compliance in the hereditary cardiomyopathy of the Syrian hamster, 367
 MASTROFRANCESCO, P. A. See MOST, A. S., *et al*
 MATHIVAT, A. See BARDET, J., *et al*
 MATTIAZZI, A. R., CINGOLANI, H. E., and GRAHAM, T. P. Lack of effect of hypercapnia acidosis on elasticity of cat papillary muscles, 559
 MENDONÇA, M. DE See DE MENDONÇA, M.
 MEYER, P. See DUVAL, D., *et al*
 MICHELASSI, C. See MASERI, A., *et al*
 MORRISON, E. S., SCOTT, R. F., LEE, W. M., FRICK, J., KROMS, M., and CHENEY, C. P. Oxidative phosphorylation and aspects of calcium metabolism in myocardia of hypercholesterolaemic swine with moderate coronary atherosclerosis, 547
 MOST, A. S., CAPONE, R. J., and MASTROFRANCESCO, P. A. Free fatty acids and arrhythmias following acute coronary artery occlusion in pigs, 198
 MURAO, H. See ROBBARD, S., and MURAO, H.
 MURPHY, G. J. See BASKETT, J. J., *et al*

N

- NAAFS, B. See DE BEER, E. L., *et al*
 NANDAKUMARAN, K. See PARKER, R., *et al*
 NARVARTE, J. See CARPENTIER, R., *et al*
 NAYLER, W. G., and FASSOLD, E. Calcium accumulating and ATPase activity of cardiac sarcoplasmic reticulum before and after birth, 231
 —, GRAU, A., and YEPEZ, C. β -adrenoceptor antagonists and the release of creatine phosphokinase from hypoxic heart muscle, 344
 NES, M. DE. See DE NES, M.
 NEUTZE, J. M. See RUSH, E. C., *et al*
 NEWCOMB, M. See CASPARI, P. G., *et al*
 NEWMAN, D. L., BATTEN, J. R., and BOWDEN, N. L. R. Partial standing wave formation above an abdominal aortic stenosis, 160
 NORESSON, E., JONES, J. V., and HALLBÄCK, M. Haemodynamic changes during tilt after autonomic blockade in spontaneously hypertensive rats, 475

O

- O'CONNOR, W. J. Normal sodium balance in dogs and in man, 375
 OGUNRO, E. A., HEARSE, D. J., and SHILLINGFORD, J. P. Creatine kinase isoenzymes: their separation and quantitation, 94
 —, PETERS, T. J., and HEARSE, D. J. Subcellular compartmentation of creatine kinase isoenzymes in guinea pig heart, 250
 OLSSON, B., BRORSON, L., HARPER, R., and RYDÉN, L. Estimation of ventricular refractoriness in man by the extra stimulus method, 31

P

- PARKER, R., NANDAKUMARAN, K., AL-JANABI, N., and ROSS, D. N. Elasticity of frozen aortic valve homografts, 156
 PARKEY, R. W. See WILLERSON, J. T., *et al*
 PASSOVOY, M. See SUSMANO, A., *et al*
 PAULUS, W. J. See BRUTSAERT, D. L., and PAULUS, W. J.
 PENG, C. L. See ZELIS, R., *et al*
 PESOLA, A. See MASERI, A., *et al*
 PETERS, T. J. See OGUNRO, E. A., *et al*
 PISANI, P. See MASERI, A., *et al*
 POLINER, L. R. See WILLERSON, J. T., *et al*
 PRASAD, K. Use of glucagon in the treatment of quinidine toxicity in the heart, 55

R

- RABERGER, G. See SCHÜLTZ, W., *et al*
 RAMWELL, P. W. See JOHNSON, M., *et al*
 REMME, W. J. See VERDOUW, P. D., *et al*
 REVIS, N. W., THOMSON, R. Y., and CAMERON, A. J. V. Lactate dehydrogenase isoenzymes in the human hypertrophic heart, 172
 RIGAUD, M. See BARDET, J., *et al*
 RIGHTMEIER, D. See TANZ, R. D., *et al*
 ROBBINS, J. B. See TANZ, R. D., *et al*
 ROBERTS, R., and SOBEL, B. E. Effect of selected drugs and myocardial infarction on the disappearance of creatine kinase from the circulation in conscious dogs, 103
 ROCHA, P. See BARDET, J., *et al*
 ROCKSTEIN, M. See CHESKY, J. A., and ROCKSTEIN, M.
 ROBBARD, S., and MURAO, H. Ventilatory effects on pulmonary vascular inflow and outflow patterns, 177
 ROSE, J. C. See JOHNSON, M., *et al*

- ROSS, D. N. See PARKER, R., *et al*
 ROTHBAUM, D. A. See ARNSDORF, M. F., *et al*
 ROUSE, E. T. See HALES, C. A., *et al*
 RUSH, E. C., NEUTZE, J. M., and HARRIS, E. A. Calibration of densitometers for indicator dye dilution: instruments and techniques, 263
 RYDÉN, L. See OLSSON, B., *et al*

S

- SALAKO, L. See VAUGHAN WILLIAMS, E. M., *et al*
 SANHUEZA, S. See CARPENTIER, R., *et al*
 SCHAPER, W. See WÜSTEN, B., *et al*
 SCHOENEGER, A. A., JOHNSON, S. P., and SULLIVAN, J. M. Myocardial renin-angiotensin extraction in man, 74
 SCHREINER, E. See ARNSDORF, M. F., *et al*
 SCHÜTZ, W., ZIMPFER, M., and RABERGER, G. Effect of aminophylline on coronary reactive hyperaemia following brief and long occlusion periods, 507
 SCHWARTZ, A. See BORNET, E. P., *et al*
 SCHWARTZ, A. MASS- See MASS-SCHWARTZ, A.
 SCOTT, R. F. See MORRISON, E. S., *et al*
 SECHER, N. J., and ANDERSEN, L. H. Changes in the pattern of regional pulmonary blood flow after PGF_{2α} infusion in pregnant women, 26
 SELWYN, A. P., and SHILLINGFORD, J. P. Praecordial mapping of Q waves and RS ratio changes in acute myocardial infarction, 167
 SEN, S., TARAZI, R. C., and BUMPUS, F. M. Cardiac hypertrophy and antihypertensive therapy, 427
 SHERIDAN, D., and TYNAN, M. Direct effect of acebutolol on force generation in immature and adult myocardium, 247
 — See also TYNAN, M., *et al*
 SHERIDAN, D. J., CULLEN, M. J., and TYNAN, M. J. Postnatal ultrastructural changes in the cat myocardium: a morphometric study, 536
 SHILLINGFORD, J. P. See OGUNRO, E. A., *et al*
 — See also SELWYN, A. P., and SHILLINGFORD, J. P.
 SMITH, T. W. See BELLER, G. A., *et al*
 SOBEL, B. E. See ROBERTS, R., and SOBEL, B. E.
 STARK, R. D., JOSHI, R. C., and BISHOP, J. M. Failure of an antagonist of histamine-chlorpheniramine to modify the pulmonary vascular response to hypoxia in chronic bronchitis, 219
 STOKELY, E. M. See WILLERSON, J. T., *et al*
 STREATFIELD, K. A., DAVIDSON, N. S., and MCCLOSKEY, D. I. Muscular reflex and baroreflex influences on heart rate during isometric contractions, 87
 SULLIVAN, J. M. See SCHOENEGER, A. A., *et al*
 SUSMANO, A., PASSOVOY, M., and CARLETON, R. A. Mechanisms of hypercapnic pulmonary hypertension, 440

T

- TANZ, R. D., ROBBINS, J. B., HARWOOD, B. N., and RIGHTMEIER, D. Reversal of aconitine-induced tachycardia by prostaglandins in the rabbit Langendorff preparation, 446
 TARAZI, R. C. See MAGRINI, F., and TARAZI, R. C.
 — See also SEN, S., *et al*
 THOMSON, R. Y. See REVIS, N. W., *et al*
 TOBIA, A. J. See WALSH, G. M., *et al*
 TURTO, H. Collagen metabolism in experimental cardiac hypertrophy in the rat and the effect of digitoxin treatment, 358

TYNAN, M., DAVIES, P., and SHERIDAN, D. Postnatal maturation of noradrenaline uptake and release in cat papillary muscles, 206

— See also SHERIDAN, D., and TYNAN, M.
SHERIDAN, D. J., *et al*

V

VAUGHAN WILLIAMS, E. M., SALAKO, L., and WITTIG, J. H. The effect on atrial and ventricular intracellular potentials, and other pharmacological actions of L9146, a non-halogenated benzo(b)thiophene related to amiodarone, 187

VERDOUW, P. D., REMME, W. J., and HUGENHOLTZ, P. G. Cardiovascular and antiarrhythmic effects of aprindine (AC1802) during partial occlusion of a coronary artery in the pig, 317: correction, 588

W

WAGNER, R. L. See MASS-SCHWARTZ, A., *et al*

WALSH, G. M., TOBIA, A. J., and FROHLICH, E. D. An autoperfusion technique for nonsteady-state vascular pressure-flow analysis in the rat, 434

WARLTIER, D. C. See GROSS, G. J., and WARLTIER, D. C.

WEINSTOCK, R. S. See MASS-SCHWARTZ, A., *et al*

WHEATLEY, D. J., and MCGREGOR, C. G. A. Influence of viability on canine allograft heart valve structure and function, 223

— Post implantation viability in canine allograft heart valves, 78

WICKS, T. C. See JOHNSON, M., *et al*

WILCKEN, D. E. L. See GILES, R. W., and WILCKEN, D. E. L.

WILLERSON, J. T., PARKEY, R. W., STOKELY, E. M., BONTE, F. J., LEWIS, S., HARRIS, R. A., BLOMQVIST, G., POLINER, L. R., and BUJA, L. M. Infarct sizing with technetium-99m stannous pyrophosphate scintigraphy in dogs and man; relationship between scintigraphic and praecordial mapping estimates of infarct size in patients, 291

WILLIAMS, E. M. VAUGHAN See VAUGHAN WILLIAMS, E. M.

WINKLER, B. See WÜSTEN, B., *et al*

WITTIG, J. H. See VAUGHAN WILLIAMS, E. M., *et al*

WOLCHINSKY, C. See ZSOTÉR, T. T., *et al*

WONG, B. Y. See GOODYER, A. V. N., *et al*

WOOD, J. M. See BORNET, E. P., *et al*

WÜSTEN, B., FLAMENG, W., WINKLER, B., and SCHAPER, W. Role of cardiac contractility in hypertrophy from chronic volume loading, 132

Y

YEPEZ, C. See NAYLER, W. G., *et al*

Z

ZARET, B. L. See DiCOLA, V. C., *et al*

ZELIS, R., LOTYSH, M., BRAIS, M., PENG, C. L., HURLEY, E., and MASON, D. T. Effects of isolated right and left ventricular stretch on regional arteriolar resistance, 419

ZIMPFER, M. See SCHÜLTZ, W., *et al*

ZSOTÉR, T. T., WOLCHINSKY, C., HENEIN, N. F., and HO, L. C. Calcium kinetics in the aorta of spontaneously hypertensive rats, 353

SUBJECT INDEX

1977, Volume 11

A

- Acebutolol, direct effect on force generation in immature and adult myocardium, 247
- Acidosis, hypercapnic, lack of effect on elasticity of cat papillary muscles, 559
- Aconitine-induced tachycardia, reversal by prostaglandins in rabbit Langendorff preparation, 446
- Action potentials, duration and tension in cat papillary muscle, relationship between, 210
- Actomyosin ATPase in the ageing male rat, 242
- Adenosine, ATP, and aminophylline, inter-relations, and the effect of indomethacin: reactive hyperaemia in dog heart, 113
- triphosphatase (ATPase) activity of cardiac sarcoplasmic reticulum, and calcium accumulating before and after birth, 231
- Adenosinetriphosphate, adenosine, and aminophylline, inter-relations, and the effect of indomethacin: reactive hyperaemia in dog heart, 113
- Allograft heart valves, canine, post implantation viability, 78
- valve, influence of viability on structure and function, 223
- Aminophylline, ATP, and adenosine, inter-relations, and the effect of indomethacin: reactive hyperaemia in dog heart, 113
- effect on coronary hyperaemia following brief and long occlusion periods, 507
- Anoxia, myocardial, physiological, biochemical, and morphological characteristics, use of semi-perfusion canine preparation, 568
- Antihistamine, chlorpheniramine, failure to modify the pulmonary vascular response to hypoxia in chronic bronchitis, 219
- Antihypertensive therapy, and cardiac hypertrophy, 427
- Aorta, of spontaneously hypertensive rats, calcium kinetics in, 353
- Aortic explants, effects of hypercholesterolaemic serum, rats, 519
- stenosis, abdominal, partial standing wave formation above, 160
- valve homografts, frozen, elasticity, 156
- Aprindine (AC1802), cardiovascular and anti-arrhythmic effects during partial occlusion of a coronary artery, pig, 317: correction, 588
- Arachidonic acid, platelets and vascular responses to, dogs, 258
- Arrhythmias, and free fatty acids following acute coronary artery occlusion, pigs, 198
- Arteriolar resistance, regional, effects of isolated right and left ventricular stretch on, 419
- Atherosclerosis, coronary, experimental, myocardial metabolism in, swine, 547
- Atrial fibres, catechol-mediated effects on action potential of, 39
- stimulation interval, and vagal nerves, combined influence on atrioventricular conduction time, 47
- stimulus, premature, analysis of interpolation evaluated by, 334
- Atrioventricular conduction time, combined influence of stimulus frequency of vagal nerves and atrial stimulus interval, 47

B

- Beta-adrenoceptor antagonists and CPK release from hypoxia, 344

- Blockade, autonomic, haemodynamics after, in SHR, 475
- Blood flow, coronary, transmural distribution, effect of intracoronary versus intravenous nitroglycerin, 499
- — pulmonary, changes after PGF_{2α}, pregnant women, 26
- — regional myocardial, effects of ischaemia and coronary reperfusion on, 489
- Bronchitis, chronic, hypoxia in, pulmonary vascular response, failure of chlorpheniramine to modify, 219

C

- Calcium accumulating and ATPase activity of cardiac sarcoplasmic reticulum before and after birth, 231
- and oxidative phosphorylation, myocardial metabolism in experimental atherosclerosis, swine, 547
- kinetics in aorta of spontaneously hypertensive rats, 353
- wash-out, after ischaemia, dog, 260
- Cardiac hypertrophy. *See* Hypertrophy
- Cardiomyopathy, hereditary, right and left ventricular compliance, Syrian hamster, 367
- Carotid junction disease, screening by spectral analysis of Doppler signals, 147
- Catheter, pig tail, use to avoid basic difficulties in local thermolysis: instruments and techniques, 576
- Chlorpheniramine, failure to modify the pulmonary vascular response to hypoxia in chronic bronchitis, 219
- Cineangiocardigrams, method of estimation of left ventricular ejection fraction from, employing a special-purpose calculator: instruments and techniques, 470
- Collagen metabolism and cardiac hypertrophy, and effect of digitoxin, 358
- in normal and hypertrophied human ventricle, human, 554
- Contractility, cardiac, role in hypertrophy from chronic volume loading, 132
- Contractions, isometric, muscular reflex and baro-reflex influences on heart rate during, 87
- Coronary artery occlusion, free fatty acids and arrhythmias in, pigs, 198
- — partial, cardiovascular and antiarrhythmic effects of aprindine (AC1802), pig, 317: correction, 581
- Coronary blood flow. *See* Blood flow, coronary
- reperfusion, and ischaemia, effects on regional myocardial blood flow and on epicardial electrogram, 489
- Creatine kinase, disappearance from circulation, effect of selected drugs and myocardial infarction, conscious dogs, 103
- — isoenzymes, subcellular compartmentation in guinea pig heart, 250
- — their separation and quantitation, 94
- phosphokinase release and beta-adrenoceptor antagonists in hypoxia, man, 344

D

- DC countershock, effect on atrial and ventricular electrophysiological properties and myocardial potassium efflux, thoracotomised dogs, 324
- Densitometers, calibration for indicator dye dilution: instruments and techniques, 263
- Dexamethasone, tritiated, binding in rabbit aorta, and arterial glucocorticoid receptors, 529
- Diastolic and systolic time intervals measured by stetho-meter: instruments and techniques, 270
- Digitoxin, effect on collagen metabolism in cardiac hypertrophy, rat, 358

- Dobutamine and dopamine, analysis of inotropic: chronotropic selectivity in anaesthetised dogs and guinea-pig isolated atria, 17
- Doppler ultrasound, in diagnosis of valvular heart disease, 461
- — spectral analysis, screening for carotid junction disease, 147
- E**
- Ejection fraction, left ventricular, estimation from cineangiocardigrams employing special-purpose calculator: instruments and techniques, 470
- Electrogram, epicardial. *See* Epicardial electrogram
- Electrophysiological changes in atrium and ventricle during progressive hyperkalaemia, dogs, 409
- Epicardial electrogram, effects of ischaemia and coronary reperfusion on, 489
- F**
- Fatty acids and arrhythmias following acute coronary artery occlusion, pigs, 198
- Femoral artery, phasic flow, changes induced by various stimuli, study with percutaneous pulsed Doppler ultrasound, 454
- G**
- Glucagon, use in treatment of quinidine toxicity in heart, 55
- Glucocorticoid receptors, arterial, and binding of tritiated dexamethasone in rabbit aorta, 529
- H**
- Haemodynamics after autonomic blockade in SHR, 475
- Harmaline, catechol-mediated effects on action potential of rat atrial fibres, 39
- Heart, hypertrophic. *See* Hypertrophy, cardiac
- as muscle and pump, loading and performance: special review article, 1
- rate, during isometric contractions, muscular reflex and baroreflex influences, 87
- valve, allograft, influence of viability on structure and function, dog, 223
- Homografts. *See* Aortic valves
- Hyperaemia, reactive, coronary, effect of aminophylline on, following brief and long occlusion periods, 507
- — evidence for a myogenic contribution, dog heart, 64
- — in heart, inter-relations between adenosine, ATP, and aminophylline and effect of indomethacin, dog, 113
- Hypercapnic pulmonary hypertension, mechanisms, 440
- Hypercholesterolaemic serum, effects on aortic explants from normal rats, 519
- Hypercapnic acidosis, lack of effect on elasticity of cat papillary muscles, 559
- Hyperkalaemia, progressive, electrophysiological changes in atrium and ventricle, dogs, 409
- Hypertension, antihypertensive therapy, and cardiac hypertrophy, 427
- hypercapnic pulmonary, mechanisms, 440
- spontaneous, calcium kinetics in aorta, rats, 353
- — haemodynamics after autonomic blockade in SHR, 475
- Hypertrophy, cardiac, and antihypertensive therapy, 427
- — and collagen metabolism, and effect of digitoxin, rat, 358
- — lactate dehydrogenase isoenzymes in, 172
- from chronic volume loading, role of cardiac contractility, 132
- induced by pressure and volume overloading, cardiac function, coronary flow and MVO_2 in, 310
- Hypoxia in chronic bronchitis, pulmonary vascular response, failure of chlorpheniramine to modify, 219
- I**
- Indicator dye dilution, calibration of densitometers for: instruments and techniques, 263
- Indomethacin, effect on reactive hyperaemia in dog heart, 113
- Infarct sizing with technetium-99m stannous pyrophosphate scintigraphy, dogs and man, 291
- Infarction, myocardial. *See* Myocardial infarction
- Inotropic: chronotropic selectivity of dobutamine and dopamine, 17
- INSTRUMENTS AND TECHNIQUES: Bedside measurement of systolic and diastolic time intervals using the stethometer, 270
- Calibration of densitometers for indicator dye dilution, 263
- A method of left ventricular ejection fraction estimation from cineangiocardigrams employing a special-purpose calculator, 470
- New approach to local thermodilution: use of pig tail catheters to avoid basic difficulties, 576
- Ischaemia, changes of kinetics of calcium washout from dog heart, 260
- and coronary reperfusion, effects on regional myocardial blood flow and on epicardial electrogram, 489
- myocardial, effect on left ventricular isovolumic contraction, 299
- L**
- L9146, pharmacological effects, 187
- Lactate dehydrogenase isoenzymes in human hypertrophic heart, 172
- Loading and performance of heart as muscle and pump: special review article, 1
- M**
- Maturation, postnatal, of noradrenaline uptake and release in cat papillary muscles, 206
- Morphine, effect on disappearance of creatine kinase from the circulation, conscious dogs, 103
- Muscles, papillary, postnatal maturation of noradrenaline uptake and release, cat, 206
- — relationship between potential duration and tension, cat, 210
- Myocardial anoxia, physiological, biochemical, and morphological characteristics, use of semi-perfusion canine preparation, 568
- infarction, effect on disappearance of creatine kinase from circulation, conscious dogs, 103
- — effects of oxygen: thermographic study in dog, 512
- — left ventricular compliance, man, 122
- — pathophysiological correlates of thallium-201 myocardial uptake, dog, 141
- — precordial mapping of Q waves and RS ratio changes, 167
- ischaemia, regional, effect on left ventricular isovolumic contraction, 299
- metabolism in experimental atherosclerosis, swine, 547
- perfusion, regional, possibilities, limitations, and technique studied by Xenon-133, 277
- renin-angiotensin extraction in man, 74
- Myocardium, immature and adult, direct effect of acebutolol on force generation, 247
- postnatal ultrastructural changes, morphometric study, cat, 536

N

- Nembutal, effect on disappearance of creatine kinase from the circulation, conscious dogs, 103
 Nitroglycerin, intracoronary versus intravenous, effect on transmural distribution, 499
 Noradrenaline uptake and release, postnatal maturation in cat papillary muscles, 206
 Norepinephrine overflow, cardiac, during cardiac sympathetic neural stimulation, dog, 481

O

- Oxidative phosphorylation and calcium myocardial metabolism in experimental atherosclerosis, swine, 547
 Oxygen, effects on myocardial infarction, thermographic study in dog, 512

P

- Pacing, estimation of ventricular refractoriness by extra stimulus method, 31
 Papillary muscles, lack of effect of hypercapnic acidosis on elasticity, 559
 — postnatal maturation of adrenaline uptake and release, cat, 206
 Performance and loading of heart as muscle and pump: special review article, 1
 Pig tail catheter. *See* Catheter, pig tail
 Platelets and vascular responses to arachidonic acid in dogs, 238
 Premature atrial stimulation, analysis of interpolation evaluated by, 334
 Pressure-flow relationships, autoperfusion technique, rat, 434
 Prostaglandin $F_{2\alpha}$ ($PGF_{2\alpha}$) infusion in pregnant women, changes in regional pulmonary blood flow, 26
 Prostaglandins, reversal of aconitine-induced tachycardia by, in rabbit Langendorff preparation, 446
 Pulmonary blood flow, regional, changes in pattern after $PGF_{2\alpha}$ infusion in pregnant women, 26
 — vascular inflow and outflow patterns, ventilatory effects, 177
 — response to hypoxia in chronic bronchitis, failure of histaminic antagonist, chlorpheniramine, to modify, 219

Q

- Q waves and RS ratio changes, precordial mapping, in acute myocardial infarction, 167
 Quinidine toxicity in heart, use of glucagon in treatment, 55

R

- Receptors, arterial glucocorticoid, binding of tritiated dexamethasone in rabbit aorta, 529
 Reflexes, muscular, and baroreceptor-cardiodepressor influences on heart rate during isometric contractions, 87
 Renin-angiotensin extraction, myocardial, in man, 74
 Reperfusion, coronary. *See* Coronary reperfusion
 RS ratio and Q waves mapping in acute myocardial infarction, 167

S

- Saralasin acetate, failure to diminish alveolar hypoxic vasoconstriction, dog, 541
 Sarcoplasmic reticulum, ATPase activity, and calcium accumulating before and after birth, 231
 Sodium balance, normal, dogs and man, 375

SPECIAL REVIEW ARTICLES

- Loading and performance of the heart as muscle and pump, 1
 Normal sodium balance in dogs and in man, 375

- Spontaneously hypertensive rats, calcium kinetics in aorta of, 353
 — haemodynamics after autonomic blockade, 475
 Stethometer, bedside measurement of systolic and diastolic time intervals using: instruments and techniques, 270
 Stimulation, sympathetic neural, norepinephrine overflow during, dog, 481
 Systolic and diastolic time intervals measured by stethometer: instruments and techniques, 270

T

- Tachycardia, aconitine-induced, reversal by prostaglandins, in rabbit Langendorff preparation, 446
 Technetium-99m stannous pyrophosphate scintigraphy to study infarct size, dogs, and man, 291
 Thallium-201 myocardial uptake in experimental infarction, pathophysiological correlates, 141
 Thermodilution, local, use of pig tail catheter to avoid basic difficulties: instruments and techniques, 576

U

- Ultrasound, Doppler, in study of changes in phasic femoral artery flow induced by various stimuli, 454

V

- Vagal nerves and atrial stimulus interval, combined influence on atrioventricular conduction time, 47
 Valium, effect on disappearance of creatine kinase from the circulation, conscious dogs, 103
 Valves, allograft, canine, post implantation viability, 78
 — aortic. *See* Aortic valves
 Valve, heart, allograft, influence of viability on structure and function, dog, 223
 Valvular heart disease, diagnosis using transcutaneous Doppler ultrasound, 461
 Vascular pressure-flow analysis, nonsteady-state, autoperfusion technique, 434
 — responses to arachidonic acid in dogs, 238
 Vasoconstriction, alveolar hypoxic, failure of saralasin acetate to diminish, dog, 541
 Ventilatory effects on pulmonary vascular inflow and outflow patterns, 177
 Ventricle, hypertrophied and normal, collagen in, human, 554
 — left, compliance, in acute myocardial infarction, man, 122
 — and right, in hereditary cardiomyopathy of Syrian hamster, 367
 — contraction, effect of regional myocardial ischaemia, 299
 — ejection fraction, left, estimation from cineangiogram employing special-purpose calculator: instruments and techniques, 470
 — hypertrophy. *See* Hypertrophy
 — refractoriness, effective right (ERVR), estimation by extra stimulus method, 31
 — stretch, right and left, isolated effects on regional arteriolar resistance, 419
 Volume loading, chronic, causing hypertrophy, role of cardiac contractility, 132

W

- Wave formation, partial standing, above an abdominal aortic stenosis, 160

X

- Xenon-133, theoretical possibilities and limitations in study of regional myocardial perfusion, 277